Product Data Sheet

hCAI/II-IN-5

 Cat. No.:
 HY-147955

 CAS No.:
 2428389-67-5

 Molecular Formula:
 $C_{21}H_{18}Cl_2N_8O_4S_2$

Molecular Weight: 581.45

Target: Carbonic Anhydrase; AChE

Pathway: Metabolic Enzyme/Protease; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	hCAI/II-IN-5 (compound MZ8) is a potent hCAI and hCAII (human carbonic anhydrase isoenzymes I and II) inhibitor, with IC $_{50}$ values of 37.88 and 45.23 nM, respectively. hCAI/II-IN-5 also shows inhibition profile against α -Glycosidase and AChE, with IC $_{50}$ values of 48.98 and 420.14 nM, respectively. hCAI/II-IN-5 can be used for the research of many diseases such as diabetes, Alzheimer's disease, heart failure, ulcer, and epilepsy ^[1] .
IC ₅₀ & Target	$IC_{50}: 37.88 \pm 0.9956 \text{ nM (hCA II)}, 45.23 \pm 0.9684 \text{ nM (hCA I)}, 48.98 \pm 0.9407 \text{ nM (}\alpha\text{-GLY)}, 420.14 \pm 0.9759 \text{ nM (AChE)}; K_{I}: 40.35 \pm 5.74 \text{ nM (hCA II)}, 50.04 \pm 5.76 \text{ nM (}\alpha\text{-GLY)}, 51.67 \pm 4.76 \text{ nM (hCA I)}, 363.96 \pm 32.87 \text{ nM (AChE)}^{[1]}$

REFERENCES

[1]. Lolak N, et al. Synthesis, characterization, inhibition effects, and molecular docking studies as acetylcholinesterase, α -glycosidase, and carbonic anhydrase inhibitors of novel benzenesulfonamides incorporating 1,3,5-triazine structural motifs. Bioorg Chem. 2020 Jul;100:103897.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA